

REMARKS

Applicant respectfully requests that the foregoing amendments be made prior to examination of the present application.

In the specification, paragraphs have been amended on pages 11, 12, 54, 55 and 60.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date 8 November 2004

By 

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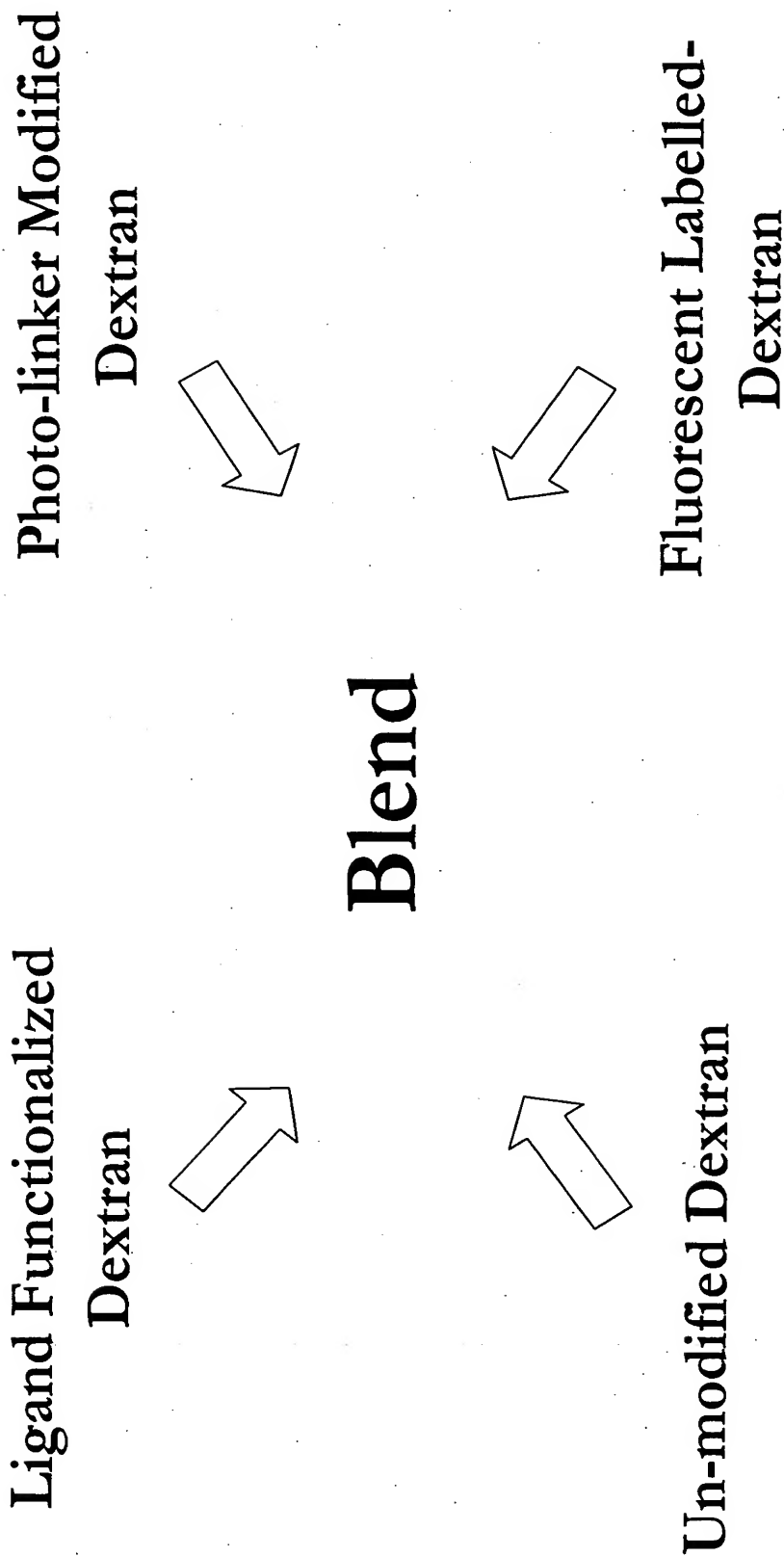
Amendments to the Drawings:

The drawing sheets attached in connection with the above-identified application containing Figure(s) 1-15C are being presented as a new formal drawing sheet or sheets to be substituted for the previously submitted drawing sheet or sheets. The drawing Figures 1-15C have been amended. Appended to this amendment is an annotated copy of the previous drawing sheets which has been marked to show changes presented in the replacement sheets of the drawings.



Title: PHOTOCROSSLINKED HYDROGEL
BLEND SURFACE COATINGS
Inventor(s): Wenxi HUANG et al.
Appl. No.: 10/802,039

Chemistry Platform of Polymer Blend



- ❖ Un-modified dextran (as a diluent of ligand-functionalized dextran and/or photo-linker modified dextran to adjust ligand and cross-linker density)
- ❖ Fluorescence-labeled dextran

Figure 1

Synthesis of Photocross-linkable Monomer

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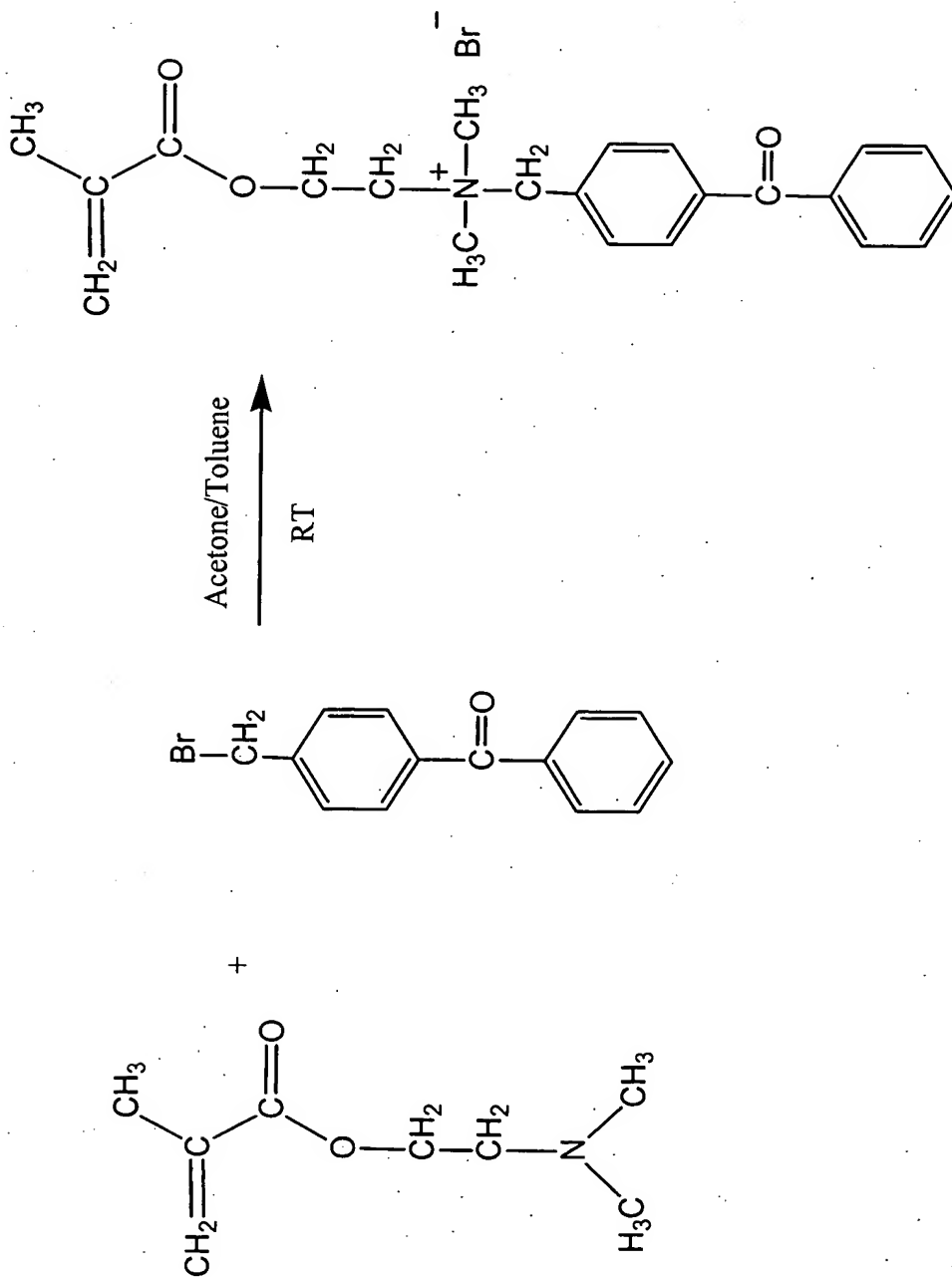


Figure-2

SAX-Copolymer Synthesis

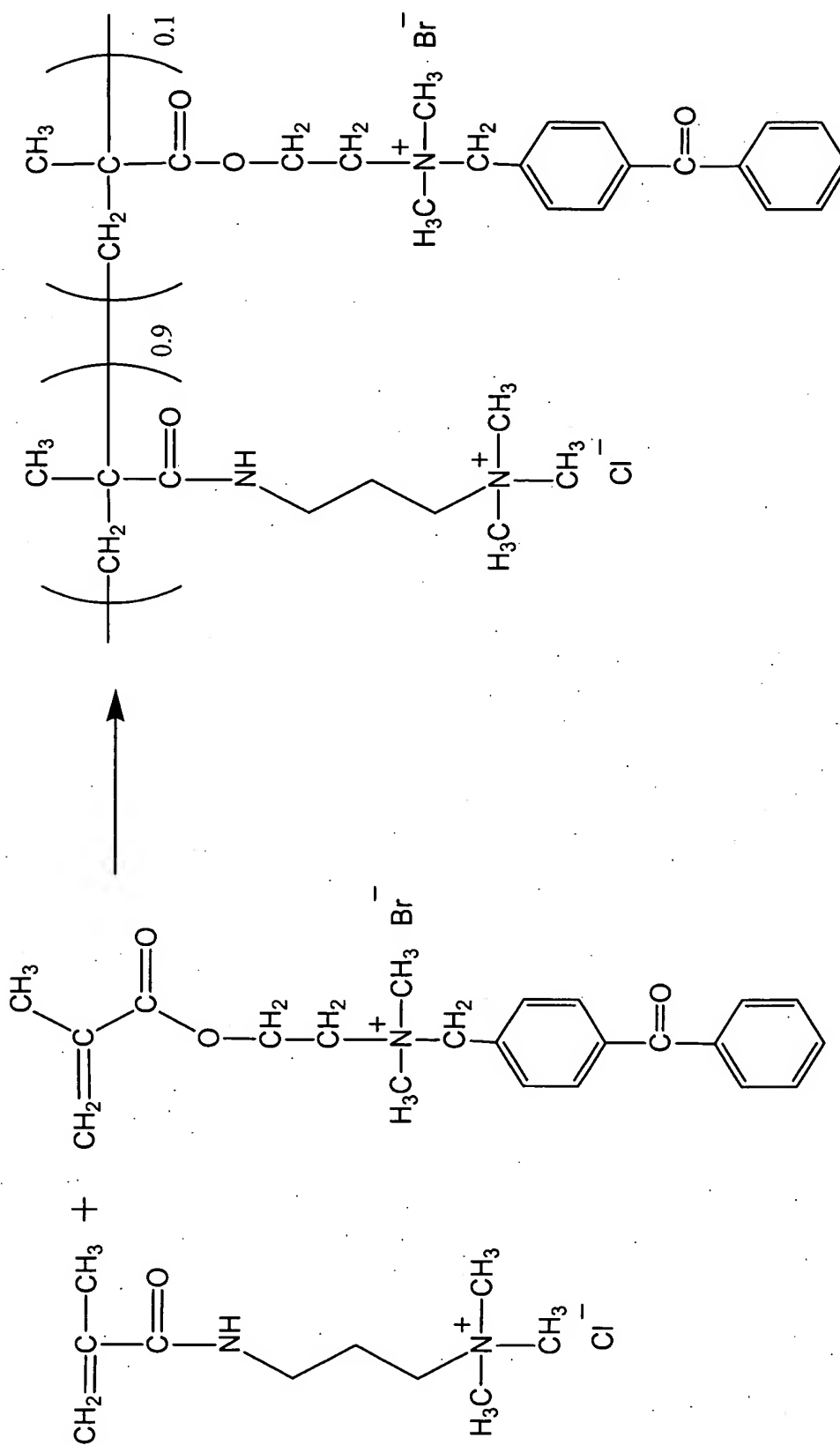


Figure 3

SELDI Spectra of 3 mol.% BP-SAX Chip Prepared by Blending (a) Low Mass Range (2- 30 kDa), (b) High Mass Range (30-160 kDa)

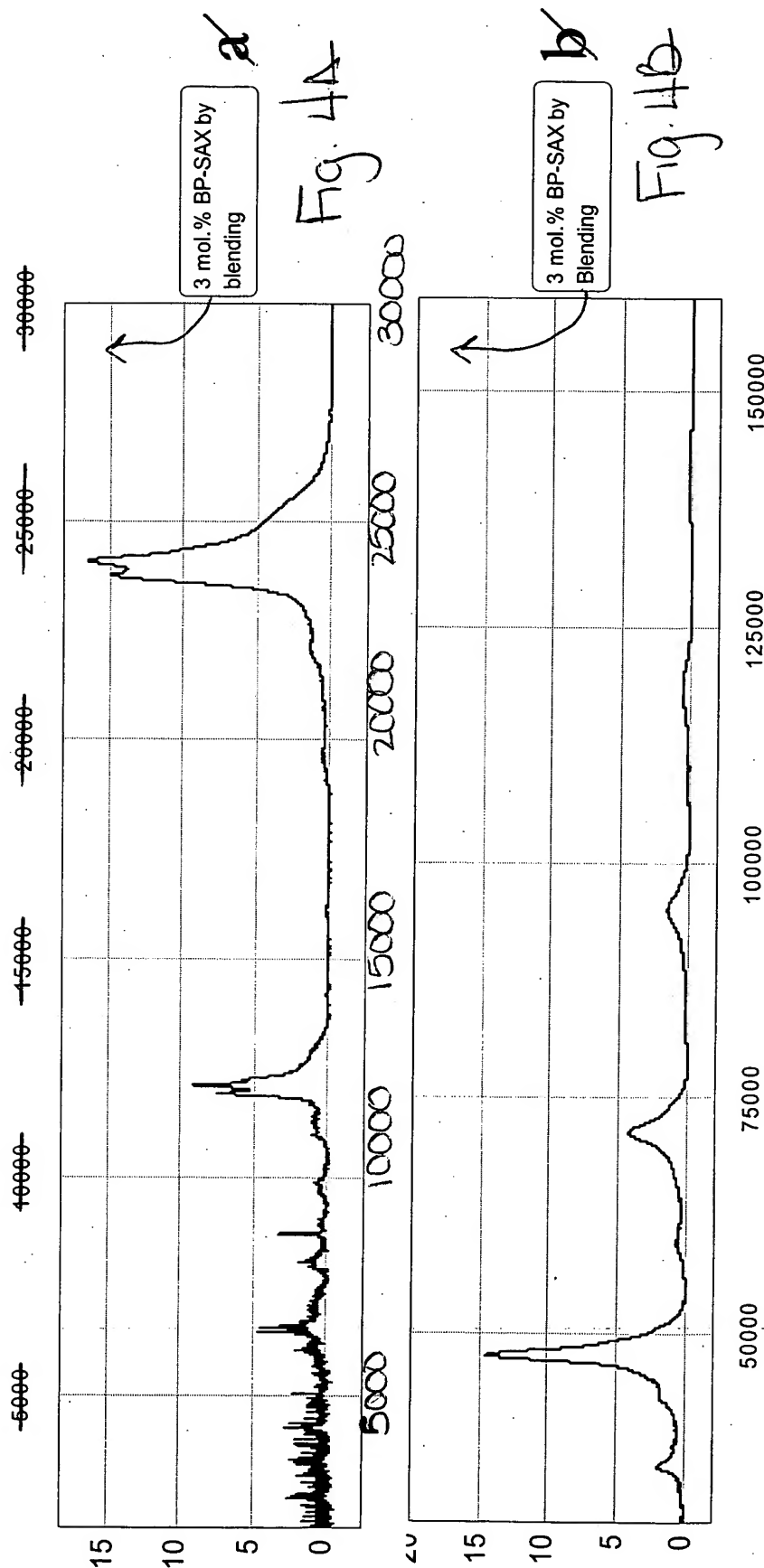


Figure 4

Derivatization of Dextran with Benzophenone

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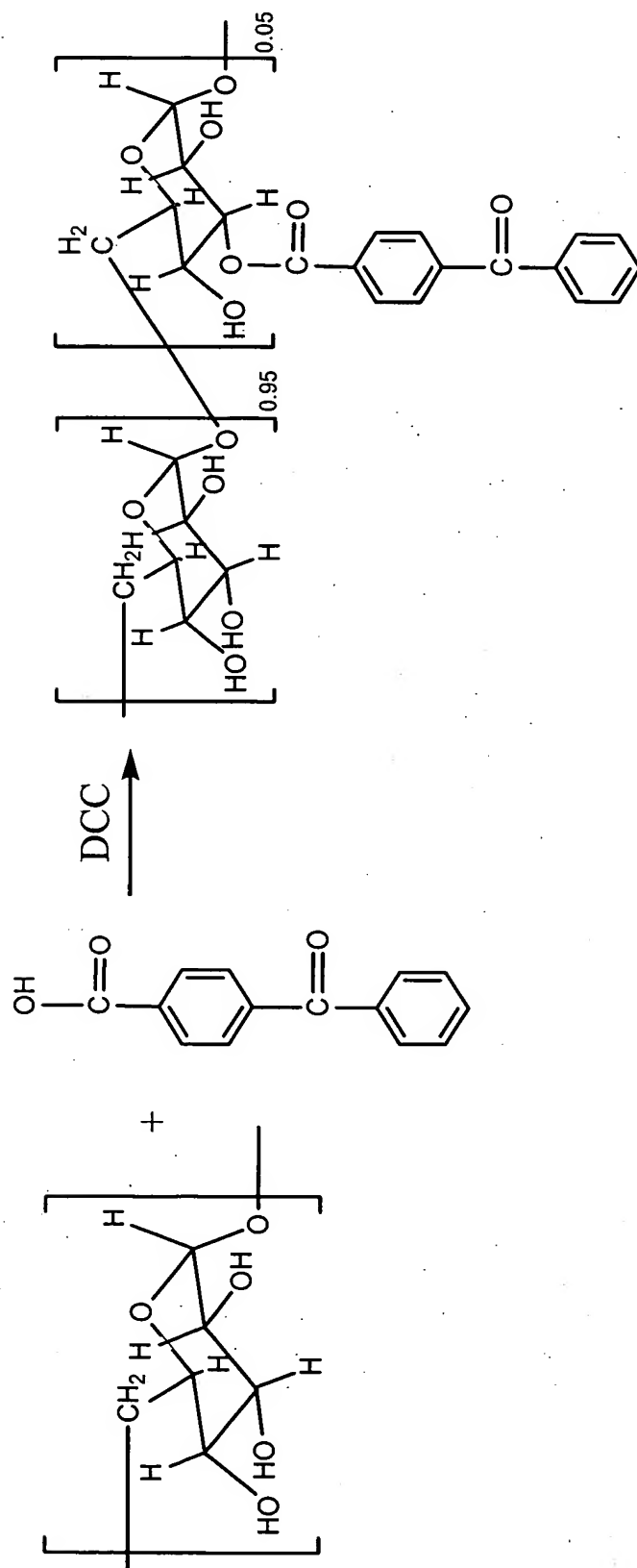


Figure 5

Synthesis of 4-(Glycidyloxy)benzophenone

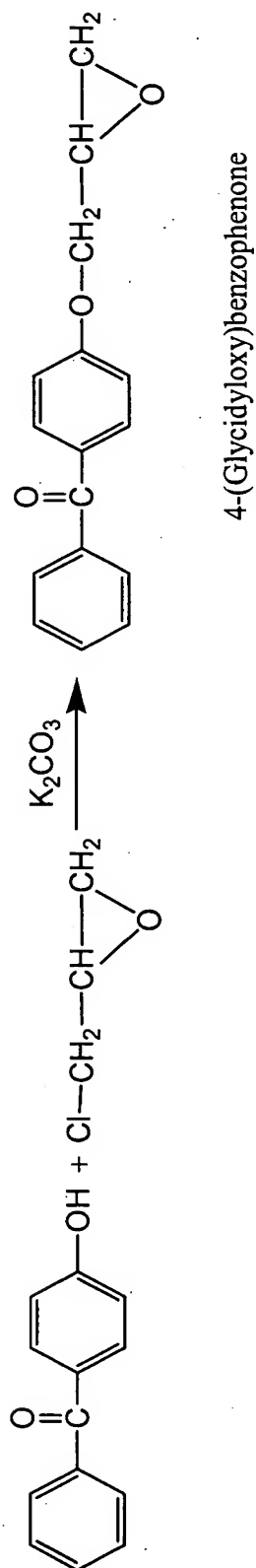


Figure 6

Derivatization of Dextran with Benzophenone

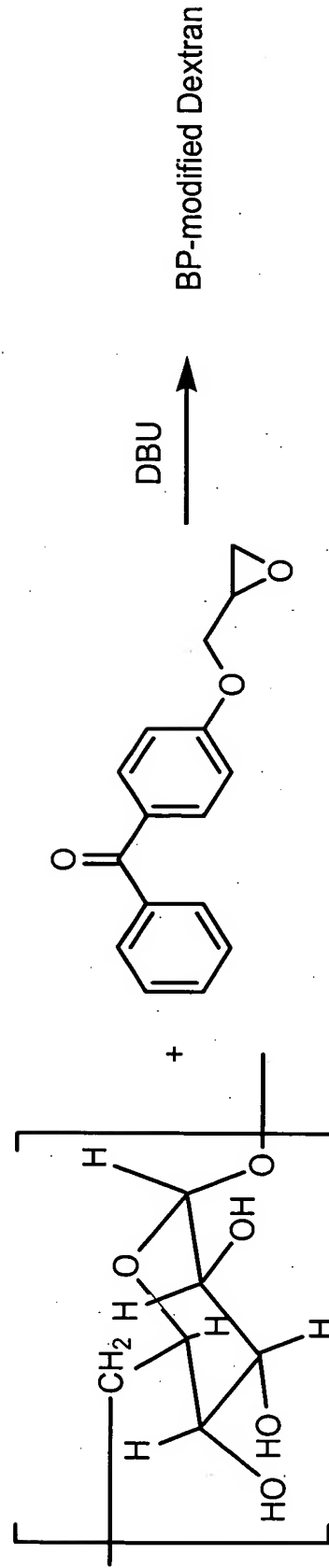


Figure 7

FTIR Spectra of (a) Dextran Hydrogel ; (b) CDI-activated Dextran Hydrogel on Al chip

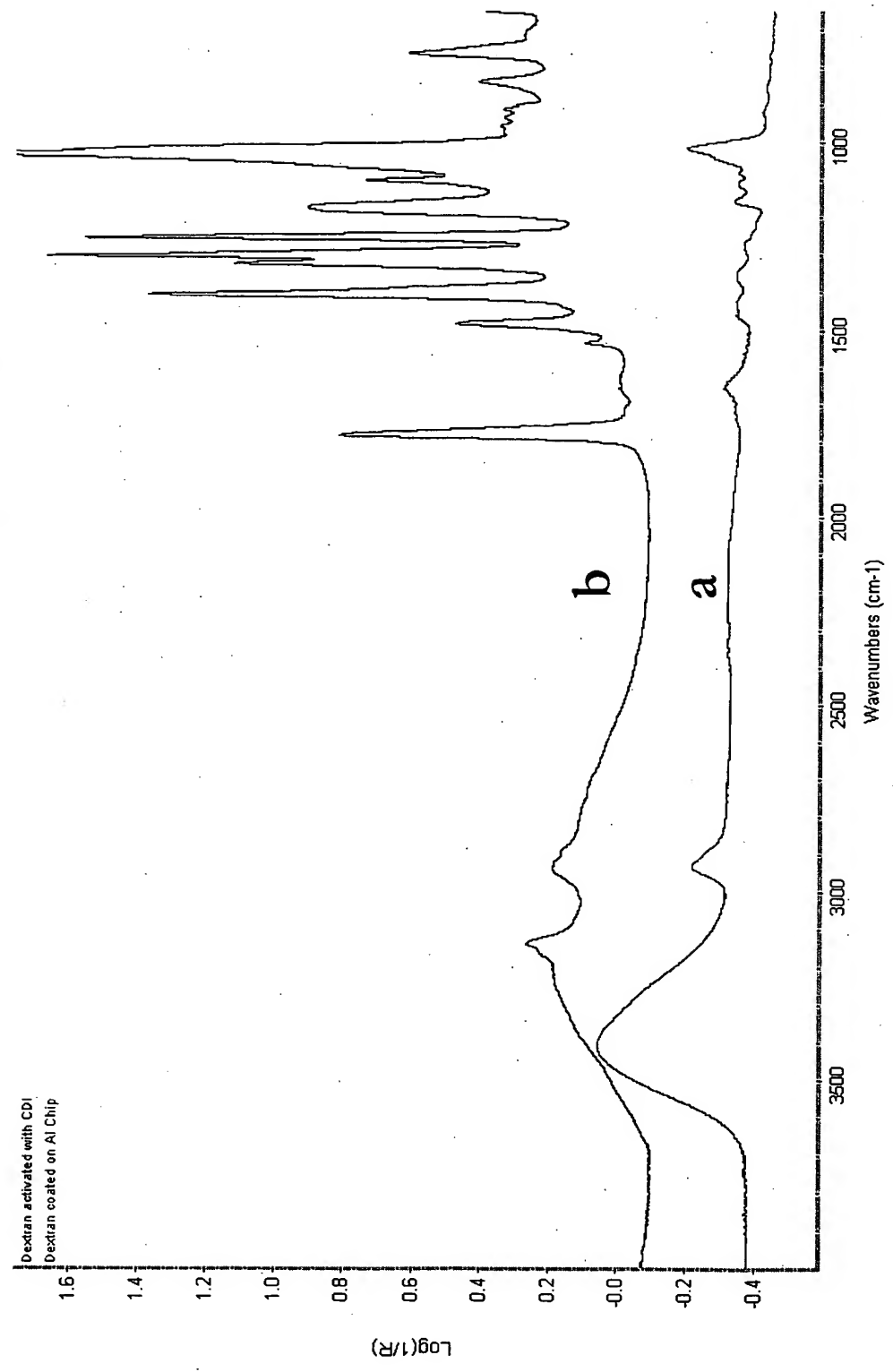


Figure 8

SELDI Spectrum of CDI-Dextran Chip Used for an Antibody-Antigen Recognition Study

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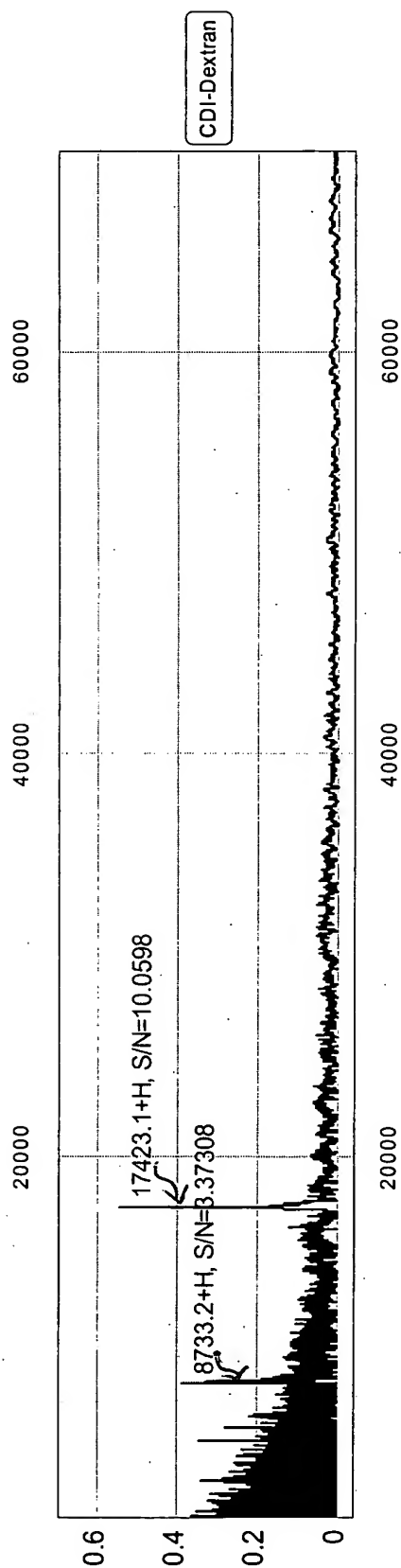


Figure 9

SELDI Spectra of DEAE Chip in the (a) Low Mass (2-20kDa), and (b) High Mass (20-160 kDa)

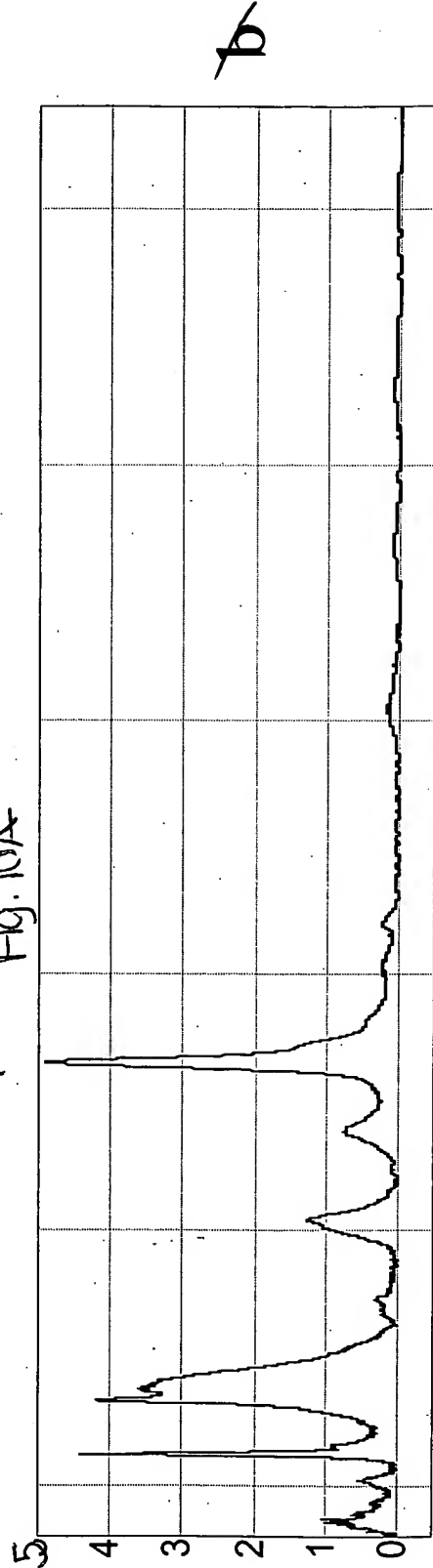
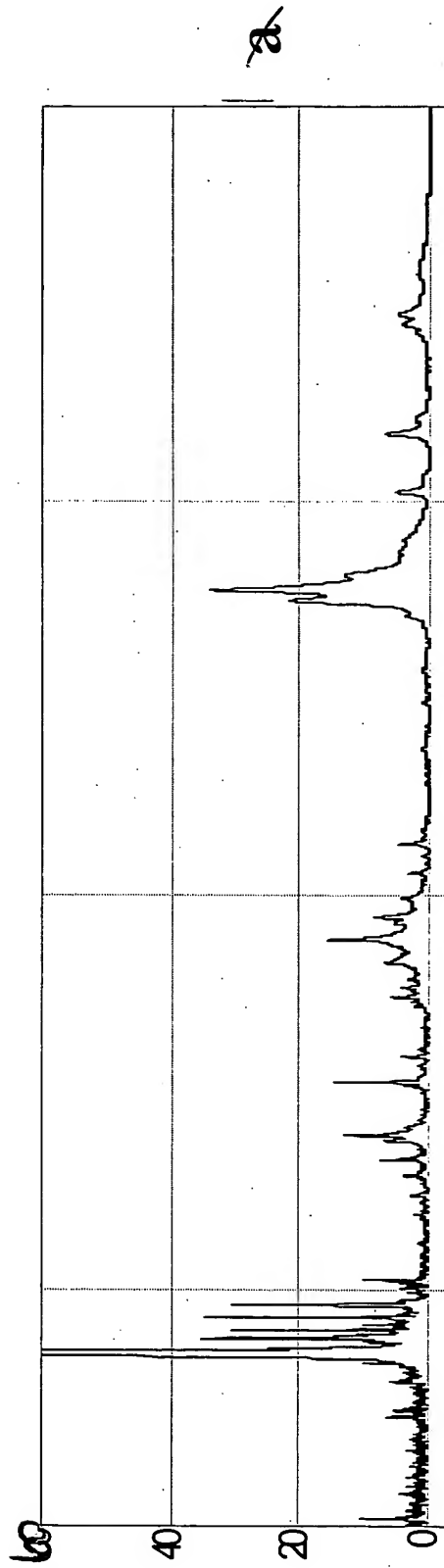
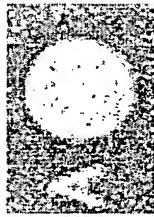


Figure 10

MEP Dyed with Ponceau S



Bare Substrate

Fig. 11A

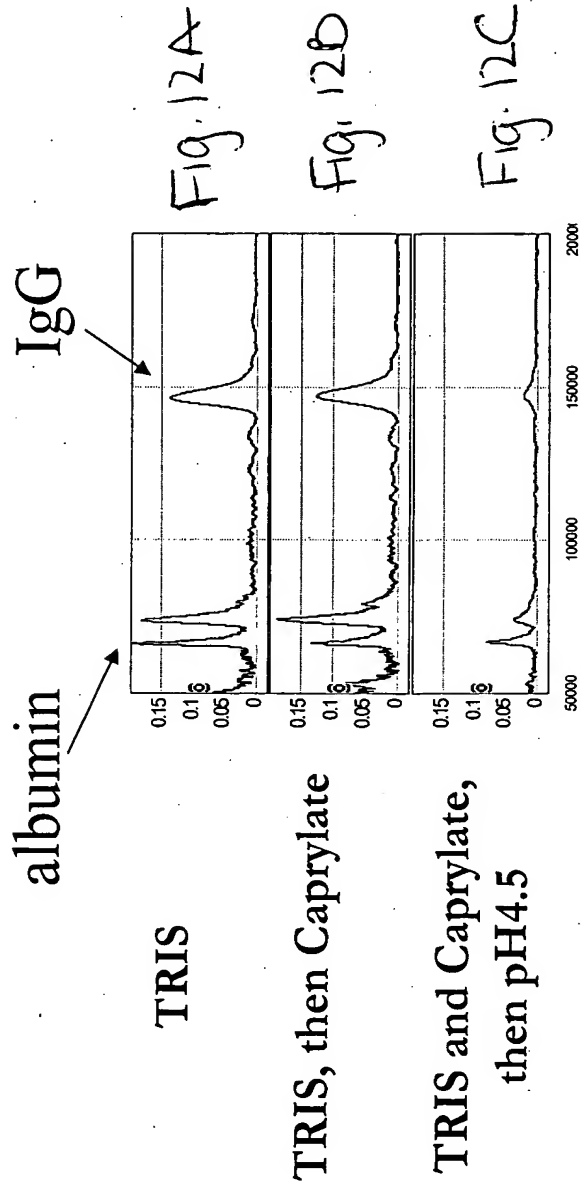


MEP Gel Coated

Fig. 11B

Selective Binding/Washing of IgG on MEP

- IgG is strongly bind to MEP Array at physiological condition, such as PBS (or TRIS) 7.2.
- Albumin is washed off little more with hydrophobic detergent like Caprylate.
- Then by lowering pH to 4.5 where MEP becomes charged, IgG is washed off.



Profiling of Albumin Depleted Serum

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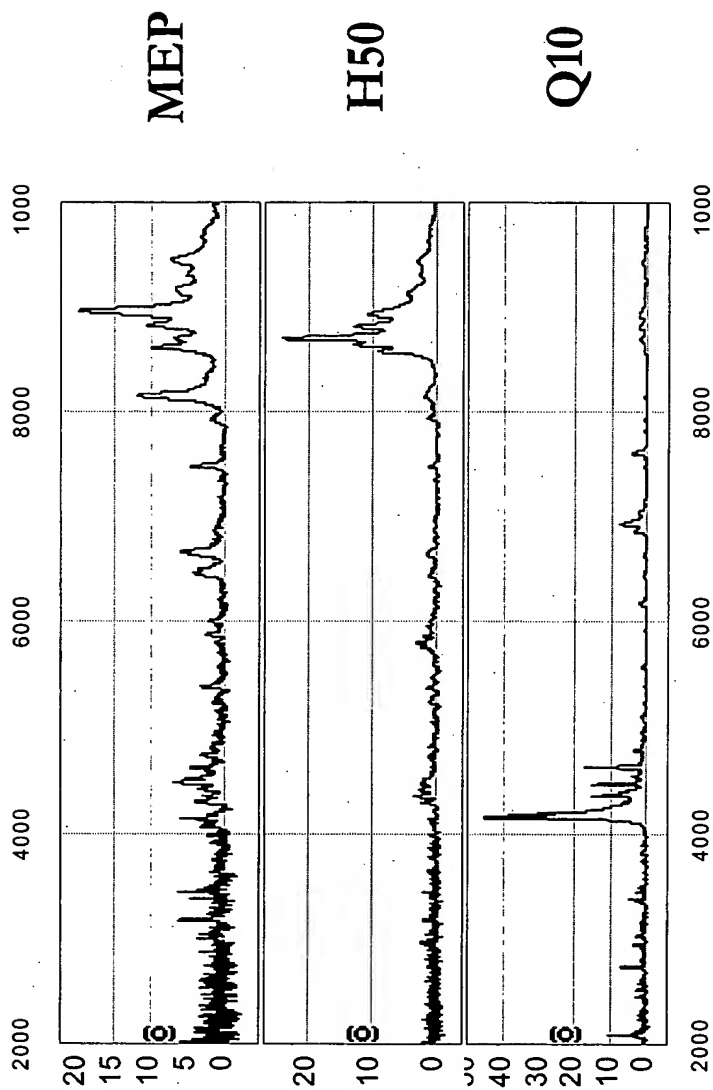
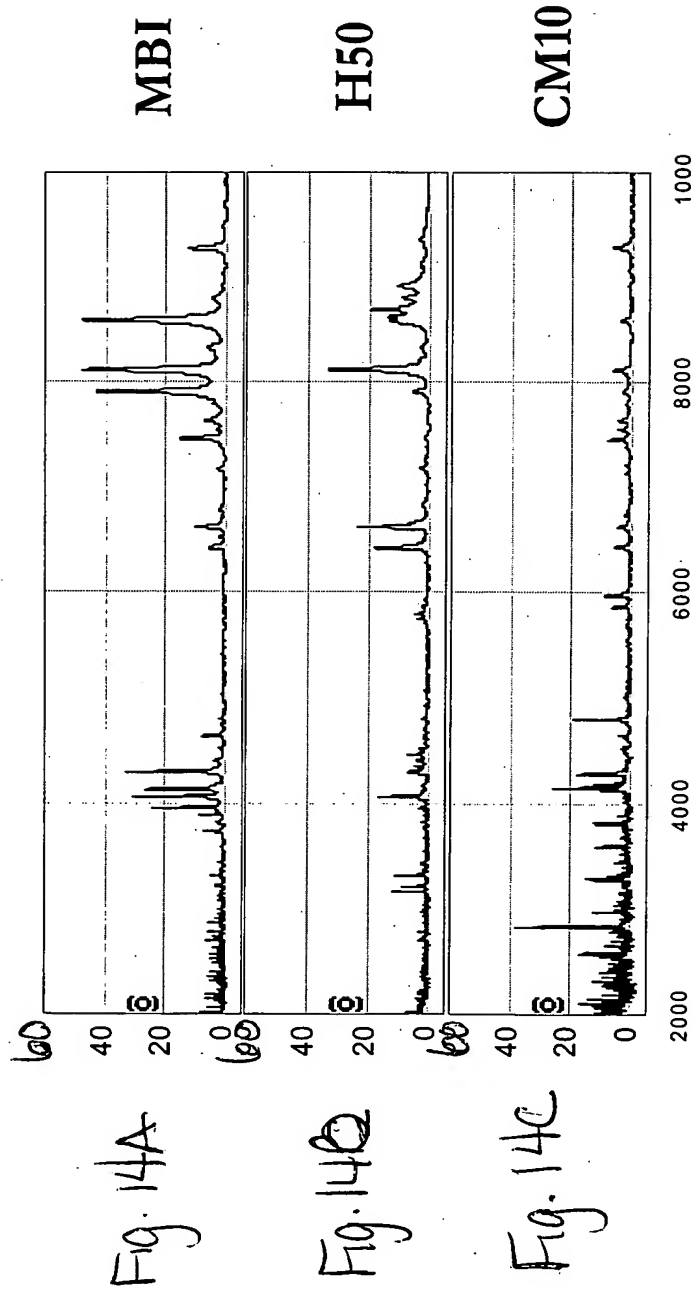


Fig. 13A

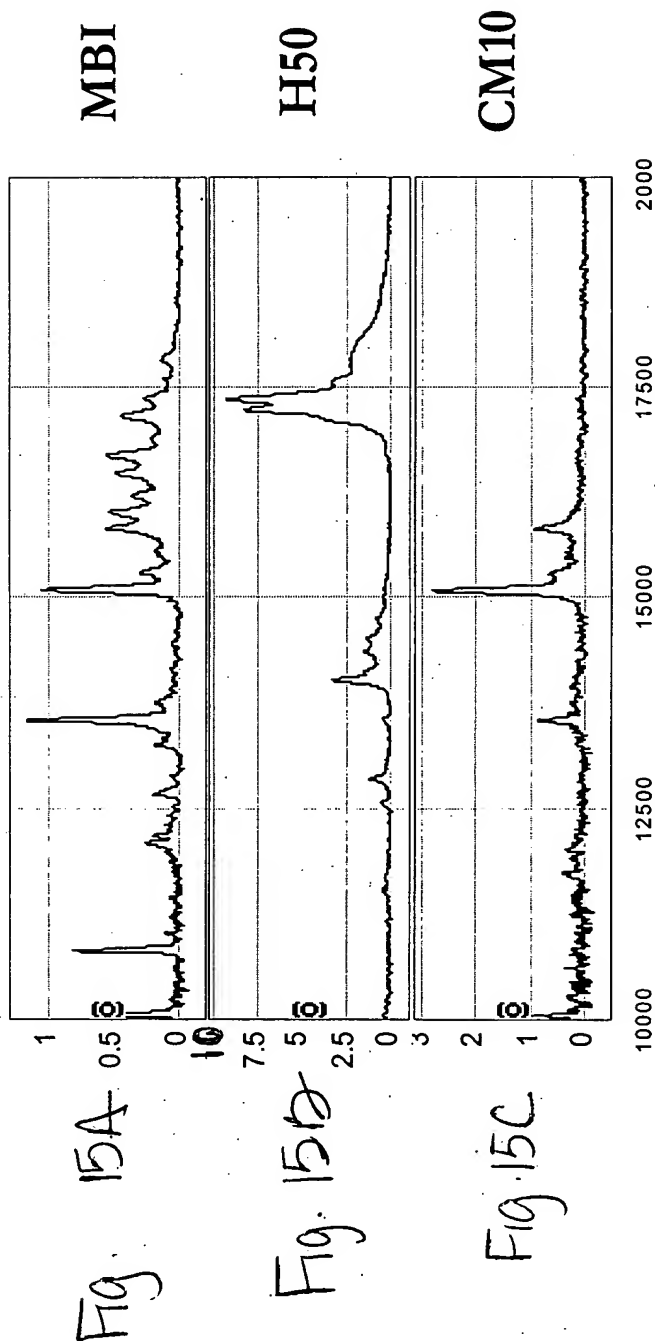
Fig. 13B

Fig. 13C

Profiling of Albumin Depleted Serum



Profiling of Albumin Depleted Serum



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